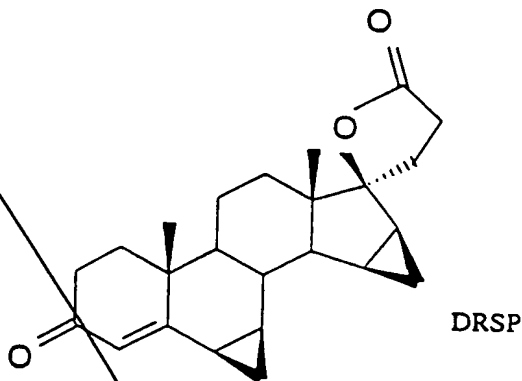


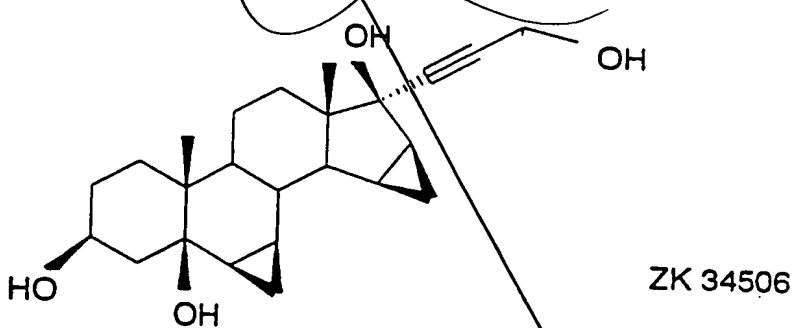
WO 98/06738

Claims

1. Process for the production of drospirenone (6 β ,7 β ; 15 β ,16 β -dimethylene-3-oxo-17 α -pregn-4-ene-21,17-carbolactone, DRSP)

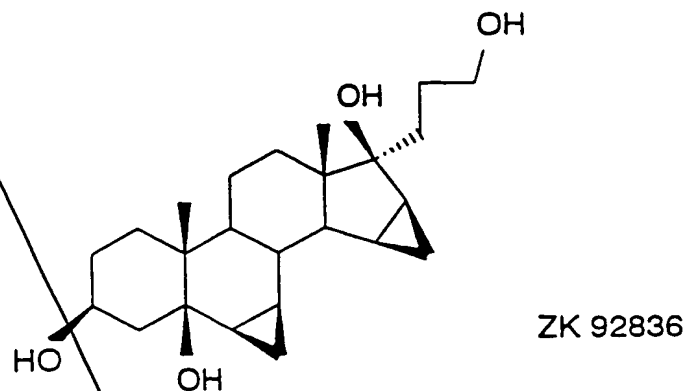


by catalytic hydrogenation of 17 α -(3-hydroxy-1-propynyl)-6 β ,7 β ;
15 β ,16 β -dimethylene-5-androstane-3 β ,5,17 β -triol (ZK 34506)

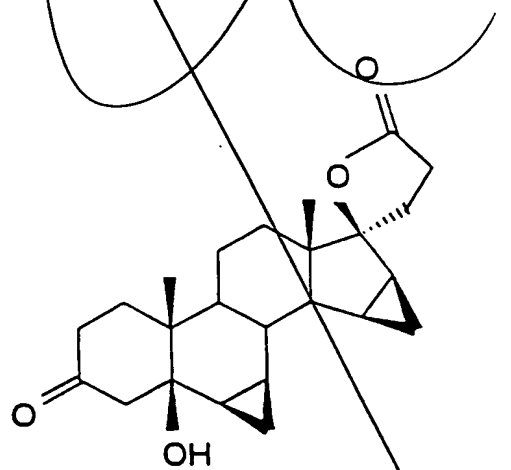


into 7 α -(3-hydroxy-1-propyl)-6 β ,7 β ; 15 β ,16 β -dimethylene-5 β -
androstane-3 β ,5,17 β -triol (ZK 92836),





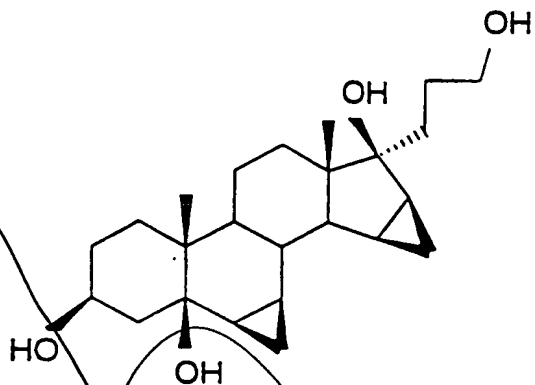
oxidation in the presence of a ruthenium salt into 6 β ,7 β ;
15 β ,16 β -dimethylene-5 α -hydroxy-3-oxo-17 α -androstande-21,17-
carbolactone (ZK 90965)



and subsequent dehydration.

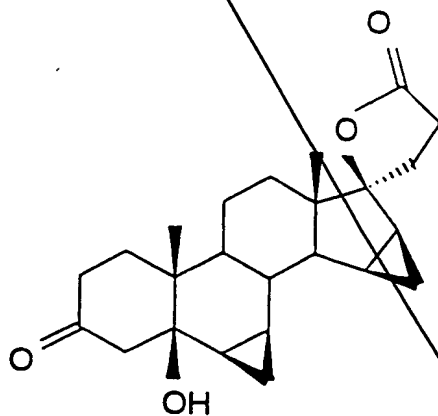
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2. 7α -(3-Hydroxy-1-propyl)- $6\beta,7\beta$; $15\beta,16\beta$ -dimethylene- 5β -androsterane- $3\beta,5,17\beta$ -triol (ZK 92836)



ZK 92836

3. $6\beta,7\beta$; $15\beta,16\beta$ -Dimethylene- 5β -hydroxy-3-oxo- 17α -androsterane-21,17-carbolactone (ZK 90965)



ZK 90965

Add A₁

Add C₃

Add R₄

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